Experiences of Opioid Use Initiation and Progression among Alaskans who Use Heroin

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Alaska PFS Partnerships for Success

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ABSTRACT

The opioid epidemic has continued in Alaska and nationwide. Information about the types of opioids that are misused first, the age of first use, and the circumstances and mode of initial and progressive use of opioids can help to inform effective prevention and early intervention efforts. These topics were explored during interviews with adults in Alaska who use heroin for the Partnerships for Success project. Results indicate that most participants were exposed to opioids through a legitimate prescription in their teens to early twenties for a severe injury or multiple surgeries before developing an addiction. Some obtained prescription opioids for misuse initially from social sources such as a friend, at a party, or stealing them from a neighbor. Only two participants began their use of opioids with heroin. All participants eventually went on to use heroin which became cheaper, more effective, and easier to obtain than prescription opioids. Few participants indicated that social influences, rather than price or availability, were a factor in their transition to heroin. Recommendations and an overview of recent state prevention initiatives and policy efforts related to the findings are presented.

BRIEF BACKGROUND

In September 2015, SAMHSA awarded the Partnerships for Success (PFS) grant to the State of Alaska Department of Health and Social Services (DHSS). The PFS grant program is a five-year effort that focuses on preventing and reducing opioid misuse and abuse among youth and young adults and building prevention capacity at both the state level and in six regions of Alaska. The PFS project has two primary focus areas: reducing access to prescription opioids for misuse or abuse; and increasing the perceived risk of harm from the misuse of prescription opioids and use of heroin. DHSS provides leadership for the project and facilitates the conduct of project activities by community-level coalitions. Additionally, DHSS contracted with the Center for Behavioral Health Research and Services (CBHRS), part of the Institute of Social and Economic Research (ISER) at the University of Alaska Anchorage (UAA), to conduct a comprehensive evaluation of the PFS project.

The opioid epidemic in Alaska continues to grow, as evidenced by increasing rates of opioid overdose deaths and opioid-associated emergency department discharges as well as the growing proportion of treatment admissions for opioids through 2017. Heroin use and the recent increase in fentanyl use appear to be the biggest drivers of these trends.[1] Polysubstance use is also common, as demonstrated by toxicology reports of opioid overdose decedents which found that 32% tested positive for alcohol, 32% tested positive for benzodiazepines, and 25% tested positive for marijuana as the most common substances. Over a third of opioid-related inpatient hospitalizations have also involved other substances; benzodiazepines being the most common.[1]

Opioid misuse is a term to describe the use of opioids without a prescription or differently than as prescribed. Previous research has found that social sources are the most common source of prescription opioids for misuse nationally and in Alaska, particularly among young people.[2-3] This includes getting pills for free, purchasing pills, and stealing pills from friends, family, and

acquaintances. While access to opioids for misuse through healthcare providers is less common, a legitimate opioid prescription among 12th graders has been independently associated with an increase in future opioid misuse risk.[4] Not everyone who misuses prescription opioids will continue down the path to addiction. National research estimates that 8-12% of individuals who misuse prescription opioids will develop an opioid use disorder.[5] Misuse of prescription opioids is also a risk factor for heroin use, as the majority of people who use heroin first misused prescription opioids.[6,7]

Detailed information about the types of opioids that are often misused first, the age of first use, and the circumstances and mode of initial and progressive use of opioids in Alaska can help to inform effective prevention and intervention efforts locally. This information was gathered through key informant interviews with individuals who use heroin in Alaska and described in this report.

INTERVIEW PROCEDURES AND PARTICIPANTS

Interview questions about opioid misuse and heroin use initiation and progression were added at the end of an interview designed to explore experiences using naloxone nasal spray kits for opioid overdose reversal among individuals with high-risk opioid use behaviors. In 2018, 18 face-to-face semi-structured interviews were conducted; participants were recruited at community-based agencies in Fairbanks, Anchorage, the Mat-Su Borough, and the Kenai Peninsula Borough where naloxone kits are distributed. Questions of interest for the PFS project were about the pattern of opioid use from the initial source of access, early use, and changes in opioid use over time (frequency, mode and substance, and amount).

Of the 18 total interviews, 14 participants (8 males; 6 females) completed the questions about initiation and progression that are described in this report. Most participants completed individual interviews; two pairs of participants preferred to complete the interview together. Eight participants were White, four were Alaska Native, and two did not disclose their race. Ages ranged from 30 to 60 with half of the participants in their 30s, four in their 40s, and three in their 50s to 60. While many participants were in their 30s and early 40s, their struggle with opioids already spanned almost two decades. Some of the older participants had been using opioids for over three decades.

ANALYSIS

Interviews were recorded, professionally transcribed, and edited for accuracy. NVivo Pro 12.0 was used to code and organize transcripts. Due to the unique and often non-linear ways in which participants' opioid use was initiated and progressed, early initiation content was summarized through careful inspection of each interview one at a time to ensure accuracy. Responses were then assigned coded categories (e.g. social access versus provider access) to aid in organization and cross-checking by other researchers.

Other experiences and content described during interviews provided rich context for responses to designed research questions. These descriptions were organized into broad themes and

assigned codes to allow for summarization by a researcher. All codes and summaries were confirmed by a second research team member. Discrepancies were flagged and discussed between researchers to reach consensus.

SUMMARY OF FINDINGS

Stories of initial opioid use and progressive use did not always follow a clear linear path. Opioid use started and stopped for different reasons among some participants. Polysubstance use was frequently reported, and opioid misuse and abuse were often interlaced in a pattern of lifelong substance abuse. Life experiences and backgrounds, as described by participants, varied greatly from being a college graduate with a supportive family to being from a "dysfunctional" family and living on the streets at a young age. One similarity among all participants was a long history of opioid abuse. Except for one participant who reported being in recovery, all participants were currently using heroin.

First Exposure to Opioids

Of the 14 interviews, the majority of participants (*n* = 12) were initially exposed to opioids through prescription opioids, either from a legitimate prescription or by accessing through social sources such as a friend, family member, or neighbor. Most participants developed an addiction connected to this initial exposure to prescription opioids. For remaining participants (*n* = 2), their first exposure to opioids was heroin which quickly led to their opioid addiction. While the pathway to opioid addiction was described differently across participants, and sometimes included use of other illicit substances, all participants eventually used heroin, and nearly all (*n* = 13) used it intravenously.

Initial exposure to prescription opioids from a provider

Of the 12 participants who initially used prescription opioids, most (*n* = 9) began with opioids prescribed to them by a medical or dental provider in their teens or twenties. Opioids were prescribed to them for severe pain due to an injury, illness, or surgery. Participants reported that they did not misuse opioids initially but these early exposures led to later misuse among eight of the nine participants.

> *"I had fallen off the ladder at work and was prescribed them by a doctor. I was 19 years old. I ended up in pain management clinics as a result of multiple surgeries…." - P2*

> *"I had three surgeries all really close together [in high school]. A tonsillectomy, a septoplasty and I had wisdom teeth extracted, that's right. And I remember….the first surgery was Tylox, which is basically Percocet in a capsule….but that was pretty much when it became my love." - P3*

> *"When I was 15 ….I broke some bones in my back and neck. I was severely injured. To this day I have a lot of issues because of it. And I remembered taking medications and some were non-narcotic, but I remember taking the narcotic ones as well. And so starting at age 15 all the way up until now it's like I have struggled with the opiate, and that's how it all began for me, as many people seem to experience." – P13*

Only one participant talked about getting high from the opioids prescribed to them as a teenager but not continuing use. This participant didn't use opioids again or develop an addiction to them until a decade later when they were given to her by a boyfriend.

> *"I was 18 or 19, and I got prescribed it, and I remember getting high. But, I was getting sick also, like really nauseous and very bad dreams. So, it never stuck with me, I never liked it. I was never really a pill popper." – P18*

Initial exposure to prescription opioids from social sources

Three participants tried prescription opioids for the first time through social sources such as stealing or obtaining them from a family member or other acquaintance or acquiring them at a party.

> "*Well the first time I used [an opioid] I was probably 12. Yeah, 11 or 12. On the streets at a keg party. Somebody was just handing out [Percocet]……" – P7*

> *"Well I remember in high school my buddy's freaking grandmother or whatever…she used to get Oxy 80's, and I was a fucking plug, pardon my language. And then there was this other lady we used to get the 20's from….I was in high school I think 13 to 18." – P5*

Initial exposure to opioids through heroin use

Only two participants bypassed the use or misuse of prescription opioids and began their use of opioids with heroin.

> *"One time I went to Portland after I was depressed about something or whatever and one of the guys from [a band] shot me up and I just, I'd been an athlete all my life and I smoked pot a little but I haven't smoked pot in ten years. I guess some people respond positive and some don't. I respond pretty positive to it…." – P4*

> "*I started – my father taught us how to shoot up drugs when I was eight after he caught us fucking snorting a line. And the doctor doesn't give you a straw, and a doctor doesn't give you a pipe. He gives you a shot or he gives you a pill, and that's the way you do it. I grew up in a very dysfunctional home, went to an institution and just lived on the streets most of my life….I was 14, 15 and [heroin] is all we did in the institution." – P16*

Reasons for Transition from Prescription Opioid Misuse to Heroin Use

While only two participants used heroin first, the remaining participants transitioned to heroin at some point during their struggle with opioids. The most common reasons cited by participants for switching to heroin were the increasing cost of prescription opioids on the street and the reduced availability of prescription opioids over time. Some also described the greater potency of heroin compared to prescription opioids as a reason. A small number of participants described social influences while a couple of participants did not provide a reason. One participant specifically described a reduction in the quantity of opioids prescribed to them which led to a need to supplement for pain management.

High cost of prescription opioids and lack of availability on the street

Participants described both the high cost of prescription opioids and the increased difficulty in obtaining them on the street as factors in the transition from using prescription opioids to heroin.

> "*Well the Oxy started getting too expensive, so at about 23, 24 I started using heroin, because it was cheaper, more readily available also." – P7*

> "*Yeah, pills were just too, they're too hard to find. They're not readily available like they used to be, and yeah they just got more scarce as time went on, and more expensive, especially because the longer you take them the more you're going to have to take." – P12*

> "*I was buying pills and I was already buying pills a little bit to make sure my count was good for my doctor if they had to do a pill count, but then I was having to buy them all the time and it was getting so expensive. All of the sudden I was paying $20 for an 80 milligram pill. Now I was paying $80 for an 80 milligram pill, and someone introduced me to heroin….I know we're the same opioid addicts, but I wouldn't touch it. I was too good for it, you know. And it was cheaper, and one day I did try it. A friend said, 'Here, try this instead.' And I did, and it had the same effect, you know. And I'm like, and it was way less money at the time." – P1*

Greater potency or effectiveness

Five participants mentioned the greater potency and effectiveness of heroin as a reason for their transition from prescription opioids to heroin. Four discussed both price and potency and one participant described potency only as the reason for using heroin.

> *"When I was 28 I started using it, just taking pills because I had it available and offered to me. Pretty easily available [from] a boyfriend at the time, and so from there – the pills were no longer available, and he was able to get heroin, so I just switched to heroin. And I was snorting it at the time. Then within a few months I wanted to inject it because the price and potency also, but I just figured I was wasting a lot of it because I was snorting it, and it was just coming back down. You'd make a mess sometimes. I'd just say, I'm wasting so much of it, why don't I just shoot it?" - P18*

> "*Heroin is like say you spend $40.00 and be like a quarter, yeah you spend $40.00 and you get a quarter gram of heroin, and then you can get like two pills for freaking $40.00 and it's just not worth it. Yeah, without a doubt [price], and the quality…..I can almost touch the ceiling with it [heroin]." – P5*

> *"I guess just learning that some of the opioids could be used that way, and it was more effective." – P10*

A reduction in opioids prescribed

One participant described a reduction in the amount of opioids prescribed to them for pain as a primary reason for seeking out heroin.

"I have cancer and he [medical provider] gave me that for pain management……They don't give you enough [now], and they're cutting you back. The DEA, federal programs like mine, I'm with the clinic, so they have to go by federal guidelines, and they're cutting back. They took me off my Oxycodone 30s and took me off my 60s and put me to 50s…I have breakthrough pain and that's where the heroin helped - with breakthrough pain." – P15

Other social influences

Two participants described social influences, specifically friends and a significant other, as reasons for transitioning from prescription opioids to heroin.

"I got really depressed [after surviving a serious illness].....and that was when I switched to harder drugs. The day I got into the accident, I didn't take another [prescription] opiate after that for a long time. Then the next time that I took [an opioid] was the first shot that I ever did that had heroin in it. I had never done heroin whatsoever before that…I was hanging out with people that – when I first started hanging out with weren't doing it that way. I didn't know they had previous experience doing it that way, and as we got into doing drugs more and more, suddenly it was like, "Oh, let's bring the needle out." I have never been a needle person, but after you watch somebody do something and have so much fun a thousand times in front of you, you do get curious. It's like, okay, I can smoke this stuff, and I can snort this stuff, and I can do what I want with it, but I want to know what that does, and it was really simple after that." – P14

Key Turning Points during Addiction to Opioids

Opioid use by participants evolved and changed over time for many similar but sometimes unique reasons as described above. For many participants, their dependence on opioids increased over time and some described a distinct and negative turning point in their lives when the use of heroin began.

"He [boyfriend] had been clean for almost three years. I had been clean for four months, so he had a lot more recovery than me, but we were also both working a strong program and had our sponsors, and we were doing really well. And then he relapsed, and then I relapsed. He relapsed twice. I relapsed after him the second time, and it was a beginning of our descent into hell…….I had never used drugs like this, and he, he shot me up……Prior to that I had taken the opiates and was just the prescription." – P13

For one participant, a clear negative turning point was the introduction of a more potent prescription opioid from a provider - Oxycontin. Another participant realized early, at their very first use, that opioid use was going to be problematic, as illustrated in the quote below. Their turning point was almost immediate.

"The day I got out of my first surgery it was pretty immediate and apparent to me that this was going to be a problem. I liked them. I liked opiates. I liked the way they made me feel. I liked the fact that I could numb out the pain in my foot and the pain in the rest of my life. It was just my great escape, and it was my demise." – P2

Two participants described experiencing a lack of available support or resources after becoming addicted to opioids during pain treatment. These participants described being cut off from

prescription opioids and not being offered any type of addiction treatment as a particularly critical issue in their struggle with opioid addiction.

> *"[Pain management doctors] pretty much [gave me] a high five and a 'good luck. Here is the deal, you've got to go. I hope you don't die.' So realistically, I left pain management with such a high tolerance and such a high need for opiates." – P2*

> *"Then I had a false positive for cocaine. That was my spiral down from my medication. I wasn't even using cocaine. I was taking an antibiotic and I found out later that that, I think it was amitriptyline or something, you know, it give me a false positive for cocaine. And so that was the first flag for them saying wait a minute, he's using other drugs, and I wasn't. I've never really ever been into coke or anything like that. And then I had gotten sick and I had taken methadone from a friend, and when the doctor saw the methadone on my system they cut me off my medication cold, just cut me off. And it was horrible." – P1*

Opioids and Polysubstance Use

While polysubstance use was not asked about directly during the interviews, half of the participants discussed use of other illicit substances. Some participants described using opioids with other drugs simultaneously or mentioned other drug use in their past before moving to opioid use. Methamphetamines and cocaine were the most commonly mentioned drugs. Two participants described their experience substituting methamphetamines for heroin in their struggle with addiction. Another participant discussed a lifetime of polysubstance use, primarily using what was available.

> *"I was addicted to crack and I went to treatment and I got out. And a friend of my ex-husband's gave me an Oxycontin because I had a really bad headache. My addict told me you can do it. It's from the doctor, you know. So I just traded one drug for another." – P7*

> *"I [combined opioids] a lot of times with methamphetamines. Sometimes with Benzos. I try not to do that though, really because it's dangerous. Once in a blue moon maybe cocaine, but only a few times really, but yeah….my habits changed as a result of the need for change as much as anything. I couldn't afford to buy prescription medication off the street because they're way more expensive than heroin. I was afraid of using a needle, so it was time to change everything altogether and I still didn't have any kind of a solution to live my life by so I just changed my drug [to methamphetamine]." – P2*

> *"I was more into an upper, on the cocaine back then. That was all I did in my life back then. I was 14, 15. …I ran away and started using cocaine, and then I came out to California, and it's all heroin. And it's cheaper, and it's better. And that's all I ever did was heroin. And then went to prison, came out of prison, I was strung out. Came up here and they didn't have that much heroin up here when I first got up …..But, now it's becoming more normal having heroin here than speed or cocaine….But, it's always been opiates. I started doing meth. That's how I kicked heroin, by doing meth – just kept with the meth. But, then when the heroin came up here, it was decent heroin, I went back to heroin." – P15*

CONCLUSIONS

Interview questions for the Partnerships for Success (PFS) project focused on opioid use initiation and progression over time and represent the experiences of 14 current and former individuals in Alaska who use heroin and who were willing to take part in the interview. One participant was in recovery. Results indicate that most participants were exposed to opioids through a legitimate prescription in their teens to early twenties for a severe injury or multiple surgeries, which was when their addiction began. Some obtained prescription opioids from social sources such as a friend, a party, or stealing them from a neighbor. Two began their use of opioids with heroin and all participants went on to use heroin eventually. Reasons for transition included prescription opioids becoming more expensive and harder to obtain through street sources and other social influences. Interview findings can be used to inform programs and policies to address opioid misuse and target prevention efforts.

Improve Opioid Prescribing Practices and Reduce Overprescribing

Many interview participants received prescription opioids from a provider for pain as a teenager or young adult many years ago and described those prescriptions as the start of their addiction. More is now known about the addictive nature of opioids and both the Centers for Disease Control and Prevention (CDC) and individual state governments have created comprehensive opioid prescribing guidelines to increase safe prescribing practices, reduce overprescribing, and reduce patient misuse.[8,9] Alaska has prescribing guidelines developed by the Alaska Opioid Policy Taskforce in 2017.[10] In response to these specific guidelines, recent legislative efforts in Alaska have taken effect to increase safe opioid prescribing practices and limit the amount of opioids that can be prescribed. Key examples include the mandatory registration and use of the Alaska Prescription Drug Monitoring Program (PDMP) by prescribers and dispensers in 2017 to ensure consistent monitoring of opioids prescribed to patients and setting new limits on the quantity of opioids that can be prescribed for initial prescriptions. In 2018, prescribers are also required to obtain two hours of continuing opioid education to renew their professional license. A more complete list of specific legislation and regulation changes affecting prescribers and dispensers can be found on the Alaska PDMP website. It will continue to be updated as more changes take effect. (https://www.commerce.alaska.gov/web/cbpl/ProfessionalLicensing/PrescriptionDrugMonitoringProgram/LegislationRegulations.aspx).

Due to these and other potential influences, opioid prescribing behaviors in Alaska appear to be changing. Medicare data is starting to show a reduction in the amount of opioids prescribed to beneficiaries 65 and older.[1] Data from the Alaska PDMP will be the best source of information to learn about opioid prescribing behavior among all registered prescribers in Alaska. Data from the PDMP may also help to understand prescriber and dispenser compliance with new opioid prescribing laws and regulations and identify areas where additional education, training, or policy efforts may be beneficial to support safe prescribing and safe use of opioids.

Increase Identification, Monitoring, and Support for Patients at Higher Risk of Opioid Addiction

As mentioned above, many interview participants developed an addiction to opioids while receiving them from a healthcare provider for treatment of long-term pain. While most patients who receive a prescription do not develop an opioid use disorder,[5] some do and long-term opioid therapy for chronic pain is a risk factor for experiencing opioid use disorder. Additional risk factors have also been identified, including a history of certain mental health conditions, a history of any substance abuse, and being prescribed opioids at a younger age.[11] Compared to peers with a history of non-medical use of prescription opioids, youth under 18 with history of non-medical use are significantly more likely to develop a substance use disorder later in life after receiving a legitimate opioid prescription.[12] Policies to enhance prevention and early intervention efforts among opioid receiving patients at higher risk for a substance use disorder could include: 1) encouraging screening and identification of patients who may be at higher risk for opioid misuse or an opioid use disorder to enhance clinical monitoring while on opioid therapy; 2) increasing conversations between patients and providers/dispensers throughout and while reducing opioid therapy to identify potential misuse, dependence or addiction; and 3) providing patients with access to relevant resources if any concerns arise.

Reduce Social Access to Prescription Opioids for Sharing, Selling, and Stealing

Accessing prescription opioids for misuse initially through social sources such as friends, family members, and neighbors at a young age was identified by a small number of interview participants. However, other national and Alaska-specific surveillance data indicate that social access to prescription opioids for non-medical use is currently the most common method of access among youth and young adults under 25 years of age.[3] Reducing social access to opioids for misuse has been a key focus of the PFS prevention grant and the Alaska Office of Substance Misuse and Addiction Prevention in recent years. Efforts have included the development of public education and awareness campaigns both statewide and in communities since 2016; these campaigns aim to reduce opportunities for individuals to access prescription opioids for misuse. Statewide media messages have focused on the dangers of prescription opioid misuse and heroin use, alternatives to prescription opioids for pain, not to share opioid prescriptions with others, and to encourage the safe storage of prescription opioids and safe disposal of unused pills. Promoting national prescription drug take-back days, establishing year-round drug disposal sites, and distributing medication disposal bags have been specific strategies implemented in PFS-funded communities. Developing policies to support year-round disposal of leftover opioids at major pharmacies throughout the state could further support these efforts statewide.

Limitations and Considerations

Conditions, knowledge, resources, and availability of opioids for misuse or abuse do not remain stable over time. Dates of opioid initiation among interview participants occurred anywhere from 10 to 30 years ago and, in some cases, outside of Alaska. Initiation patterns among young people may look different today. For example, access to heroin and other lethal opioids such as

fentanyl are on the rise in Alaska, with increasing rates of overdose deaths from these substances. Overdose deaths due to prescription opioids, on the other hand, appear to be stabalizing.[1] Understanding current opioid initiation trends and progression to addiction is a challenge but important for developing prevention and intervention efforts that are most appropriate and effective.

While funding and time were limited, the interview questions for this pilot study were made possible through direct coordination with evaluation activities for another opioid-related project evaluation (i.e. Alaska's Project HOPE) and provided information that can be used for further enhance current prevention efforts. With numerous opioid grants in existence, coordinating evaluation efforts such as this can increase efficiencies, be mutually beneficial, and should be used whenever possible.

Conclusion

Addressing the opioid epidemic requires successful prevention to reduce the number of individuals who misuse prescription opioids and abuse heroin. With federal and state funding, the State of Alaska has taken steps at multiple levels to reduce easy access to opioids through providers and social sources based on recommendations by the Alaska Opioid Policy Taskforce in 2017.[10] These efforts also address weaknesses identified by key informant interview participants. Monitoring trends in available data such as reported opioid misuse from statewide surveillance surveys and rates of overdose opioid deaths, ER poisoning discharges, and treatment admissions from other data sources will continue to shed light on progress being made over time and identify new emerging trends. Individuals' stories of opioid initiation and progression should also be regularly gathered, as means of accessing opioids and transitions to misuse or abuse can change over time. Together, such data and information are important for informing and refining Partnerships for Success and other prevention activities in Alaska's communities.

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